

# Operator's Manual



Curved Shaft, 4-Cycle Trimmer Model YM26CS



**IMPORTANT:** Read safety rules and instructions carefully before operating equipment.

NOTE: For users on U.S. Forest Land and in the states of California, Maine, Oregon and Washington. All U.S. Forest Land and the state of California (Public Resources Codes 4442 and 4443), Oregon and Washington require, by law that certain internal combustion engines operated on forest brush and/or grass-covered areas be equipped with a spark arrestor, maintained in effective working order, or the engine be constructed, equipped and maintained for the prevention of fire. Check with your state or local authorities for regulations pertaining to these requirements. Failure to follow these requirements could subject you to liability or a fine. This unit is factory equipped with a spark arrestor. If it requires replacement, accessory part #753-04121 Spark Arrestor Screen is available by contacting the service department at 550 N. 54th STREET, CHANDLER, AZ 85226-2434.

MTD SOUTHWEST INC 550 N. 54TH STREET, CHANDLER, ARIZONA 85226-2434

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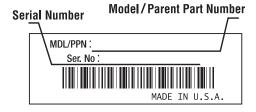
### FINDING MODEL NUMBER

This Operator's Manual is an important part of your new trimmer. It will help you assemble, prepare, and maintain the unit for best performance. Please read and understand what it says.



**Before you start assembling your new equipment**, please locate the model plate on the unit and copy the information from it to the space provided below. The information on the model plate is very important if you need help from our Customer Support Department or an authorized dealer.

You can locate the model number by looking on the underside of the engine. A sample model plate is
explained below. For future reference, please copy the model number and the serial number of the
equipment in the space below.



Copy the model / parent part number here:		
Copy the serial number here:		

### **CALLING CUSTOMER SUPPORT**

If you have difficulty assembling this product or have any questions regarding the controls, operation or maintenance of this unit, please call the Customer Support Department.



Call 1- (800)-345-8746, or in Canada 1- (800)-668-1238, to reach a Customer Support representative. Please have your unit's model number and serial number ready when you call. See previous section to locate this information. You will be asked to enter the serial number in order to process your call.

### **VISIT OUR WEB SITE**

Visit our web site at www.yardman.com for more information about our quality Yard Man products, customer service, parts, tips, literature and more.

### SPARK ARRESTOR

NOTE: For users on U.S. Forest Land and in the states of California, Maine, Oregon and Washington. All U.S. Forest Land and the state of California (Public Resources Codes 4442 and 4443), Oregon and Washington require, by law that certain internal combustion engines operated on forest brush and/or grass-covered areas be equipped with a spark arrestor, maintained in effective working order, or the engine be constructed, equipped and maintained for the prevention of fire. Check with your state or local authorities for regulations pertaining to these requirements. Failure to follow these requirements could subject you to liability or a fine. This unit is factory equipped with a spark arrestor. If it requires replacement, ask your LOCAL SERVICE dealer to install the accessory part #753-04121 Spark Arrestor.

### WARNING!

Read the Operator's Manual(s) and follow all warnings and safety instructions. Failure to do so can result in serious injury to the operator and/or bystanders.

FOR QUESTIONS, CALL 1-800-345-8746 IN U.S. OR 1-800-668-1238 in CANADA

### **SECTION 1: IMPORTANT SAFE OPERATION PRACTICES**



The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols and their explanations deserve your careful attention and understanding. The safety warnings do not by themselves eliminate any danger. The instructions or warnings they give are not substitutes for proper accident prevention measures.



SAFETY ALERT SYMBOL: Indicates danger, warning, or caution. Attention is required in order to avoid serious personal injury. May be used in conjunction with other symbols or pictographs.

**NOTE**: Advises you of information or instructions vital to the operation or maintenance of the equipment.



DANGER: Failure to obey a safety warning will result in serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.



WARNING: Failure to obey a safety warning can result in injury to yourself and others. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.



CAUTION: Failure to obey a safety warning may result in property damage or personal injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock+ and personal injury.

#### READ ALL INSTRUCTIONS

WARNING: When using the unit the safety rules must be followed. For your own safety and that of bystanders please read these instructions before operating the unit. Please keep the instructions safe for later use.

### **BEFORE OPERATING**

- Read this operating instruction manual carefully. Be thoroughly familiar with the controls and the proper use of the equipment. Know how to stop the unit and disengage the controls quickly.
- Do not operate this unit when tired, ill, or under the influence of alcohol, drugs, or medication.
- Never allow children to operate the equipment. Never allow adults unfamiliar with the instructions to use the unit. Never allow adults to operate the equipment without proper instruction.
- Children and teens under the age of 15 must not use the unit, except for teens guided by an adult.
- Inspect the unit before use. Replace damaged parts.
   Check for fuel leaks. Make sure all fasteners are in place and secure. Replace cutting attachment parts that are cracked, chipped, or damaged in any way. Make sure the cutting attachment is properly installed and securely fastened. Be sure the cutting attachment shield is properly attached, and positioned as recommended. Failure to so can result in personal injury to the operator and bystanders, as well as damage to the unit.
- Use only 0.080 inch (2.03 mm) diameter genuine manufacturer's replacement line. Never use metalreinforced line, wire, chain, or rope, etc. These can break off and become dangerous projectiles.
- Be aware of the risk of injury to the head, hands and feet.
- Clear the area to be cut before each use. Remove all objects such as rocks, broken glass, nails, wire, or string which can be thrown or become entangled in the cutting attachment. Clear the area of children, bystanders and pets. At a minimum, keep all children, bystanders and pets outside a 50 feet (15 m) radius; there still may be a risk to bystanders from thrown objects. Bystanders should wear eye protection. If you are approached, stop the engine and cutting attachment immediately.
- Squeeze the throttle control and check that it returns automatically to the idle position. Make all adjustments or repairs before using unit.
- Be sure the cutting attachment is not in contact with anything before starting the unit.

 This unit was not designed to be used as a brushcutter.
 Do not attach or operate this unit with any type of brushcutting blade or brushcutting attachment.

# SAFETY WARNINGS FOR GAS TRIMMERS

**WARNING:** Gasoline is highly flammable, and its vapors can explode if ignited. Take the following precautions:

- Store fuel only in containers specifically designed and approved for the storage of such materials.
- Always stop the engine and allow it to cool before filling the fuel tank. Never remove the cap of the fuel tank, or add fuel, while the engine is hot. Never operate the unit without the fuel cap securely in place. Loosen the fuel tank cap slowly to relieve any pressure in the tank.
- Add fuel in a clean, well-ventilated area outdoors where there are no sparks or flames. Slowly remove the fuel cap only after stopping engine. Do not smoke while fueling or mixing fuel. Wipe up any spilled fuel from the unit immediately.
- Avoid creating a source of ignition for spilled fuel. Do not start the engine until fuel vapors dissipate.
- Move the unit at least 30 feet (9.1 m) from the fueling source and site before starting the engine. Do not smoke. Keep sparks and open flames away from the area while adding fuel or operating the unit.

#### WHILE OPERATING

- Never start or run the unit inside a closed room or building. Breathing exhaust fumes can kill. Operate this unit only in a well ventilated area outdoors.
- Wear safety glasses or goggles that are marked as meeting ANSI Z87.1 standards, and ear/hearing protection when operating this unit. Wear a face or dust mask if the operation is dusty.
- Wear heavy, long pants, boots, gloves and a long sleeve shirt. Do not wear loose clothing, jewelry, short pants, sandals, or go barefoot. Secure hair above shoulder level.
- The cutting attachment shield must always be in place while operating the unit. Do not operate unit without both trimming lines extended, and the proper line installed. Do not extend the trimming line beyond the length of the shield.
- This unit has a clutch. The cutting attachment remains stationary when the engine is idling. If it does not, have the unit adjusted by any nonroad engine repair establishment, individual or authorized service dealer.
- Adjust the J-handle to your size to provide the best grip.

- Be sure the cutting attachment is not in contact with anything before starting the unit.
- · Use the unit only in daylight or good artificial light.
- Avoid accidental starting. Be in the starting position whenever pulling the starter rope. The operator and unit must be in a stable position while starting. See Starting/Stopping Instructions.
- Use the right tool. Use this tool only for the purpose intended.
- Do not overreach. Always keep proper footing and balance.
- Always hold the unit with both hands when operating.
   Keep a firm grip on both the front and rear handle or grips.
- Keep hands, face and feet at a distance from all moving parts. Do not touch or try to stop the cutting attachment while it is rotating.
- Do not touch the engine, gear housing, or muffler. These parts get extremely hot from operation and remain hot for a short time after turning the engine off.
- Do not operate the engine faster than the speed needed to cut, trim, or edge. Do not run the engine at high speed when not cutting.
- Always stop the engine when cutting is delayed or while walking from one cutting location to another.
- If you strike or become entangled with a foreign object, stop the engine immediately and check for damage. Do not operate before repairing damage. Do not operate the unit with loose or damaged parts.
- Stop and switch the engine to OFF for maintenance, repair, or for changing the cutting attachment or other attachments.
- Use only replacement parts and accessories approved by the manufacturer for this unit. These are available from your authorized service dealer. Use of any non approved parts or accessories could lead to serious injury to the user, or damage to the unit, and void your warranty.
- Keep unit clean of vegetation and other materials.
   They may become lodged between the cutting attachment and shield.
- To reduce fire hazard, replace faulty muffler and spark arrestor, keep the engine and muffler free from grass, leaves, excessive grease or carbon build up.

### OTHER SAFETY WARNINGS

 Never store the unit, with fuel in the tank, inside a building where fumes may reach an open flame or spark.

- Allow the engine to cool before storing or transporting. Be sure to secure the unit while transporting.
- Store the unit in a dry area, locked up or up high to prevent unauthorized use or damage, out of the reach of children.
- Never douse or squirt the unit with water or any other liquid. Keep handles dry, clean and free from debris. Clean after each use. See Cleaning and Storage Instructions.
- Keep these instructions. Refer to them often and use them to instruct other users. If you loan someone this unit, also loan them these instructions.

### SAVE THESE INSTRUCTIONS

#### SAFETY AND INTERNATIONAL SYMBOLS

This operator's manual describes safety and international symbols and pictographs that may appear on this product. Read the operator's manual for complete safety, assembly, operating and maintenance and repair information.

#### **SYMBOL**

#### **MEANING**



#### SAFETY ALERT SYMBOL

Indicates danger, warning, or caution. May be used in conjunction with other symbols or pictographs.



#### WARNING - READ OPERATOR'S MANUAL

Read the Operator's Manual(s) and follow all warnings and safety instructions. Failure to do so can result in serious injury to the operator and/or bystanders.



#### WEAR EYE AND HEARING PROTECTION

**WARNING:** Thrown objects and loud noise can cause severe eye injury and hearing loss. Wear eye protection meeting ANSI Z87.1-1989 standards and ear protection when operating this unit. Use a full face shield when needed.



#### KEEP BYSTANDERS AWAY

**WARNING:** Keep all bystanders, especially children and pets, at least 50 feet (15 m.) from the operating area.



#### PRIMER BULB

Push primer bulb, fully and slowly, 5 to 7 times.



#### UNLEADED FUEL

Always use clean, fresh unleaded fuel.



#### OIL

Refer to operator's manual for the proper type of oil.

#### **SYMBOL**

#### **MEANING**



THROWN OBJECTS AND ROTATING CUTTER CAN CAUSE SEVERE INJURY

**WARNING:** Do not operate without the cutting attachment shield in place. Keep away from the rotating cutting attachment.



ON/OFF STOP CONTROL

ON / START / RUN



ON/OFF STOP CONTROL

OFF OR STOP



HOT SURFACE WARNING

Do not touch a hot muffler or cylinder. You may get burned. These parts get extremely hot from operation. When turned off they remain hot for a short time.



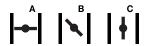
SHARP BLADE

**WARNING:** Sharp blade on cutting attachment shield. To prevent serious injury, do not touch line cutting blade.



DO NOT USE METAL BLADES

**WARNING:** To prevent serious injury, do not attach or operate the unit with any type of metal blade.



CHOKE CONTROL

- A FULL choke position.
- **B PARTIAL** choke position.
- C RUN position.

## **SECTION 2: KNOW YOUR TRIMMER**

# **Spark Arrestor APPLICATIONS** Spark Plug As a trimmer; Muffler -Cutting grass and light weeds. Edging Decorative trimming around trees, fences, etc. Muffler Guard Other optional accessories may be used with the 875r. See list of add-ons on page 13. Fuel Cap Starter Rope Grip On/Off Stop Control **Shaft Grip** Throttle Control J-Handle EZ-Link<sup>™</sup> Coupler Choke Lever Spark Plug **Shaft Housing** Air Filter Cover Primer Bulb Cutting Attachment Shield Line Cutting Blade **Cutting Attachment** Oil Fill Plug / Dipstick **Engine Feet**

## **SECTION 3: ADJUSTING THE J-HANDLE**

#### **ADJUSTING THE J-HANDLE**

1. Loosen the four (4) screws holding the J-handle in place (Fig. 1). Do not completely remove the screws.

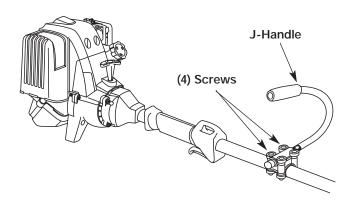


Fig. 1

2. Slide the J-handle in or out until the arrow/white line on the decal touches the clamp assembly (Fig. 2).

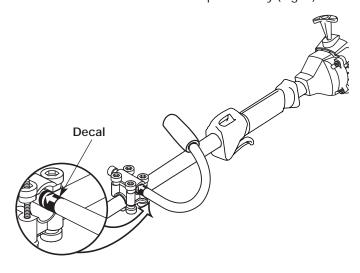


Fig. 2 -

3. While holding the unit in the operating position (Fig. 3), position the J-handle to the location that provides you the best grip.



4. Tighten the clamp screws evenly, until the J-handle is secure.

### **SECTION 4: OIL AND FUEL INFORMATION**



DANGER: OVERFILLING OIL CRANKCASE MAY CAUSE SERIOUS PERSONAL INJURY! The importance of checking and maintaining the proper oil level in the crank case cannot be overemphasized. Check oil before each use and change as needed. See Changing the Oil in the Maintenance and Repair Instructions section.

#### **RECOMMENDED OIL TYPE**



Using the proper type and weight of oil in the crankcase is extremely important. Check the oil before each use and change the oil regularly. Failure to use the correct oil, or

using dirty oil, can cause premature engine wear and failure.

Use a high-quality SAE 30 weight oil of API (American Petroleum Institute) service class SF, SG, SH.

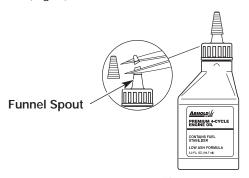
#### ADDING OIL TO CRANKCASE - INITIAL USE

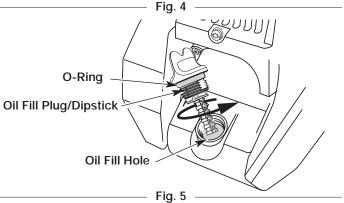
**NOTE:** This unit is shipped without being filled with oil. In order to avoid damage to the unit, put oil in the crankcase before attempting to start unit.

Your unit is supplied with one 3.4 fluid oz. (100 ml.) bottle of SAE 30 SF, SG, SH oil (Fig. 4).

NOTE: Save the bottle to measure the correct amount for future oil changes. See Changing the Oil in the Maintenance and Repair Instructions section.

- 1. Unscrew the top of the bottle of oil and remove the paper seal covering the opening. Replace top. Cut the tip off the funnel spout (Fig. 4).
- 2. Place the unit on a flat level surface.
- Remove the oil plug / dipstick from the crankcase (Fig. 5).





4. Pour the entire bottle of oil into the oil fill hole (Fig. 6).

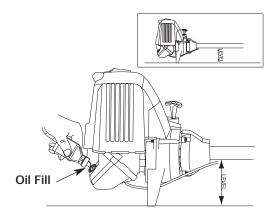


Fig. 6

**NOTE**: Never add oil to the fuel or fuel tank.

5. Wipe up any oil that may have spilled and reinstall the oil fill plug/dipstick.



#### RECOMMENDED FUEL TYPE

Old fuel is the primary reason for the unit not running properly. Be sure to use fresh, clean, unleaded gasoline.

NOTE: This is a four cycle engine. In order to avoid damage to the unit, do not mix oil with qasoline.

#### **Definition of Blended Fuels**

Today's fuels are often a blend of gasoline and oxygenates such as ethanol, methanol or MTBE (ether). Alcohol-blended fuel absorbs water. As little as 1% water in the fuel can ruin the fuel or form acids when stored. Use fresh fuel (less than 60 days old), when using alcohol-blended fuel.

#### **Using Blended Fuels**

If you choose to use a blended fuel, or its use is unavoidable, follow recommended precautions.

- Always use fresh unleaded gasoline
- Use the fuel additive STA-BIL® or an equivalent.
- Drain tank and run the engine dry before storing unit.

#### **Using Fuel Additives**

The use of fuel additives, such as STA-BIL<sup>®</sup> Gas Stabilizer or an equivalent, will inhibit corrosion and minimize the formation of gum deposits. Using a fuel additive can keep fuel from forming harmful deposits in the carburetor for up to six (6) months. Add 0.8 oz. (23 ml.) of fuel additive per gallon of fuel according to the instructions on the container. NEVER add fuel additives directly to the unit's gas tank.

### **SECTION 4: OIL AND FUEL INFORMATION**

#### **FUELING UNIT**

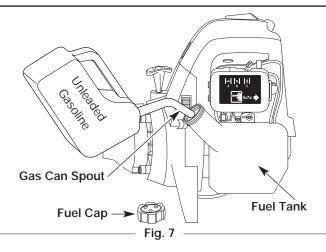


**WARNING:** Gasoline is extremely flammable and its vapors can explode if ignited. To avoid serious personal injury, always stop the engine and allow it to cool before filling the fuel tank. Do not smoke while filling the tank. Keep sparks and open flames away from the area.

Remove fuel cap (Fig. 7).



**WARNING:** Remove fuel cap slowly to avoid injury from gasoline spray.



2. Place spout of gas container into the fill hole on the fuel tank (Fig. 7) and fill tank.



**WARNING:** Add gasoline in a clean, well ventilated area outdoors. Avoid creating a source of ignition for spilt fuel.

NOTE: Do not overfill tank.

- 3. Wipe up any gasoline that may have spilled
- 4. Reinstall the fuel cap.



**WARNING:** Never operate the unit without the fuel cap securely in place.

5. Move the unit at least 30 ft. (9.1 m) from the fueling source and site before starting the engine.

**NOTE:** Dispose of the old gasoline in accordance to Federal, State and Local regulations.

### SECTION 5: STARTING/STOPPING INSTRUCTIONS

#### STARTING INSTRUCTIONS

Cold Start - First Start of the Day or Engine Ran Out of Fuel



**WARNING:** Operate this unit only in a well ventilated area outdoors. Carbon monoxide exhaust fumes can be lethal in a confined area.

- Check oil level in crankcase. See Checking the Oil Level in the Maintenance and Repair Instructions section.
- 2. Fill the fuel tank with fresh, clean, unleaded gasoline.
- Put the Start/Stop Engine Control in the START [I] position (Fig. 8).

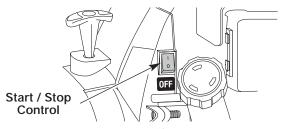


Fig. 8

4. Place the choke lever in the **FULL** choke (**A**) |→| position (Fig. 9).

**NOTE:** Slide the choke lever directly above the appropriate symbol on air filter cover decal (Fig. 9).

5. Fully press and release the primer bulb slowly 7 times. Gasoline should be felt and visible in the bulb (Fig. 9). If gasoline has not entered the bulb, press three more times, or until it does.

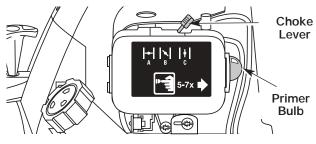


Fig. 9

### SECTION 5: STARTING/STOPPING INSTRUCTIONS

- 6. Squeeze the throttle control to the wide open (full throttle) position.
- 7. With the unit in the starting position (Fig. 10) pull the starter rope briskly 5 times in the FULL choke (A) |→| position. If the engine attempts to run before the fifth pull, proceed to step 8.

NOTE: The engine will not run in the FULL choke (A) |→| position.

9. Pull the starter rope 1 to 3 pulls until the engine starts. Run for 15-30 seconds. If the unit fails to start return to step 7.

NOTE: If the outside temperature is below 40°F (4°C), run the unit at full throttle for 30 seconds to one (1) minute

10. Move the choke lever to the **RUN** (**C**) | ∤ | position and run at full throttle for 30 seconds, and up to one (1) minute in temperatures below 40°F (4° C).



WARNING: Avoid accidental starting. Be in the starting position whenever pulling the starting rope. To avoid serious personal injury, the operator and unit must be in a stable position while starting.

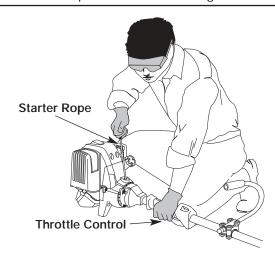


Fig. 10

11. Release the throttle control to the idle position and begin operation.

NOTE: If the engine does not start using these procedures, repeat steps 5 through 11 using TWO (2) pulls in the FULL choke (A) |→| position.

#### **Engine Re-Start - Warm Engine With Fuel**

- 1. Put the Start/Stop Engine Control in the **START** [I] position (Fig. 8).
- Move the choke lever to the PARTIAL (B) | ► | position (Fig. 9).
- Fully press and release the primer bulb slowly 7 times. Gasoline should be felt and visible in the bulb (Fig. 9). If gasoline has not entered the bulb, press three more times, or until it does.
- 4. Squeeze the throttle control to the wide open (full throttle) position.
- 5. With the unit in the starting position (Fig. 10), pull the starter rope briskly until the engine starts.
- When the engine starts, move the choke lever to the RUN (C) | ∤ | position, and run at full throttle for 30 seconds, and up to one (1) minute in temperatures below 40°F (4° C).

NOTE: If the engine does not start using the Engine Re-start procedures, revert to the Cold Start procedures earlier in this section.

NOTE: 4-stroke engines, like cars, are able to start in the idle position. As an alternate method, you may want to start your unit in the idle position when the unit is warm. With the Start/Stop control in the START position, pull the starter rope briskly. When the engine starts, run at full throttle for 30 seconds. If the unit fails to start or dies, revert to the Engine Re-Start proceedure.

#### STOPPING INSTRUCTIONS

- 1. Release your hand from the throttle control (Fig. 10). Allow the engine to idle.
- 2. To stop the engine, put the Start/Stop Engine Control in the **STOP** [O] position (Fig. 8).

### **SECTION 6: OPERATING INSTRUCTIONS**

#### OPERATING THE EZ-LINK<sup>™</sup> SYSTEM

The EZ-Link<sup>TM</sup> system enables the use of these optional add-ons.

Blower/Vacuum	′720r
Cultivator GC	720r
Edger LE	720r
Hedge Trimmer	720r
Snow Thrower ST	720r
Straight Shaft TrimmerSS	725r
Sweeper/BlowerSB	3720r
Tree PrunerTP	720r
Turbo Blower	3720r



**WARNING:** Read and understand operator's manual for add-on prior to operation.

#### Removing the Cutting Attachment or Add-Ons:

- 1. Turn the knob counterclockwise to loosen (Fig. 11).
- 2. Press and hold the release button (Fig. 11).
- While firmly holding the upper shaft housing, pull the cutting attachment or add-on straight out of the EZ-Link<sup>™</sup> coupler (Fig. 12).

#### Installing the Cutting Attachment or Add-Ons:



**WARNING:** To avoid serious personal injury and damage to the unit, shut unit off before removing or installing add-ons.

**NOTE:** To make installing or removing the add-on easier, place the unit on the ground or on a work bench.

1. Turn knob counterclockwise to loosen (Fig. 11).

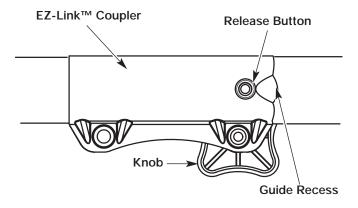


Fig. 11 -

 While firmly holding the add-on, push it straight into the EZ-Link<sup>™</sup> coupler (Fig. 12).

**NOTE:** Aligning the release button with the guide recess will help installation (Fig. 11).

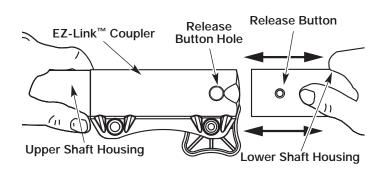


Fig. 12 -

3. Turn the knob clockwise to tighten (Fig. 11).

### SECTION 6: OPERATING INSTRUCTIONS

#### HOLDING THE TRIMMER



WARNING: Always wear eye, hearing, foot and body protection to reduce the risk of injury when operating this unit.

Before operating the unit, stand in the operating position (Fig. 13). Check for the following:

- The operator is wearing eye protection and proper clothing.
- The right arm is slightly bent, and the hand is holding the shaft grip.
- The left arm is straight, and the hand is holding the J-handle.



Fig. 13

- The unit is at waist level.
- The cutting attachment is parallel to the ground and easily contacts the vegetation to be cut without the operator having to bend over.

#### ADJUSTING TRIMMING LINE LENGTH

The Bump Head™ cutting attachment allows you to release trimming line without stopping the engine. To release more line, lightly tap the cutting attachment on the ground (Fig. 14) while operating the trimmer at high speed.

**NOTE**: Always keep the trimming line fully extended. Line release becomes more difficult as cutting line becomes shorter

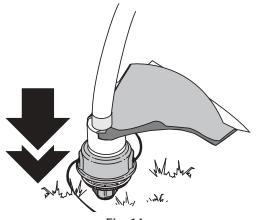


Fig. 14

Each time the head is bumped, about 1 inch (25.4 mm.) of trimming line is released. A blade in the cutting attachment shield will cut the line to the proper length if excess line is released.

For best results, tap the Bump Head™ on bare ground or hard soil. If line release is attempted in tall grass, the engine may stall. Always keep the trimming line fully extended. Line release becomes more difficult as the cutting line becomes shorter.

**NOTE**: Do not rest the Bump Head™ on the ground while the unit is running.



CAUTION: Do not remove or alter the line cutting blade assembly. Excessive line length will make the clutch overheat. This may lead to serious personal injury or damage to the

Some line breakage will occur from:

- Entanglement with foreign matter
- Normal line fatigue
- Attempting to cut thick, stalky weeds
- Forcing the line into objects such as walls or fence posts

#### TIPS FOR BEST TRIMMING RESULTS

- Keep the cutting attachment parallel to the ground.
- Do not force the cutting attachment. Allow the tip of the line to do the cutting, especially along walls. Cutting with more than the tip will reduce cutting efficiency and may overload the engine.
- Cut grass over 8 inches (200 mm) by working from top to bottom in small increments to avoid premature line wear or engine drag.
- Cut from left to right whenever possible. Cutting to the right improves the unit's cutting efficiency. Clippings are thrown away from the operator.
- Slowly move the trimmer into and out of the cutting area at the desired height. Move either in a forwardbackward or side-to-side motion. Cutting shorter lengths produces the best results.
- Trim only when grass and weeds are dry.
- The life of your cutting line is dependent upon:
  - Following the previous trimming techniques
  - What vegetation is being cut
  - Where it's being cut

For example, the line will wear faster when trimming against a foundation wall as opposed to trimming around a tree.

### **SECTION 6: OPERATING INSTRUCTIONS**

#### **DECORATIVE TRIMMING**

Decorative trimming is accomplished by removing all vegetation around trees, posts, fences, etc.

Rotate the whole unit so that the cutting attachment is at a 30° angle to the ground (Fig. 15).

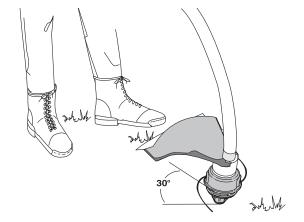


Fig. 15

### SECTION 7: MAINTENANCE AND REPAIR INSTRUCTIONS

**NOTE:** Some maintenance procedures may require special tools or skills. If you are unsure about these procedures take your unit to an authorized service dealer.

#### MAINTENANCE SCHEDULE

These required maintenance procedures should be performed at the frequency stated in the table. They should also be included as part of any seasonal tune-up.



**WARNING:** To prevent serious injury, never do maintenance or repairs with unit running. Always do maintenance and repairs on a cool unit. Disconnect spark plug wire to ensure the unit will not start.

**NOTE:** Maintenance, replacement, or repair of the emission control devices and system may be performed by any nonroad engine repair establishment, individual or authorized service dealer.

In order to assure peak performance of your engine, inspection of the engine exhaust port may be necessary after 50 hours of operation. If you notice lost RPM, poor performance or general lack of acceleration, this service may be required. If you feel your engine is need of this inspection, refer service to any nonroad engine repair establishment, individual or authorized service dealer for repair. **DO NOT** attempt to perform this process yourself as engine damage may result from contaminants involved in the cleaning process for the port.

FREQUENCY	MAINTENANCE REQUIRED	REFER TO:
Before starting engine	Fill fuel tank with fresh fuel Check oil	Page 10-11 Page 19
Every 10 hours	Clean and re-oil air filter	Page 20-21
1st Change at 10 hours Every 25 hours there after Every 25 hours	Change oil Change oil Clean spark arrestor	Page 19-20 Page 19-20 Page 24
10 hours on new engine  Every 25 hours	Check rocker arm to valve clearance and adjust as required  Check rocker arm to valve clearance and adjust as	Page 22-23
Every 25 hours	required  Check spark plug condition and gap	Page 22-23 Page 24

#### LINE INSTALLATION FOR THE SPEEDSPOOL®

Always use genuine Ryobi 0.080 inch (2.03 mm) replacement line. Line other than specified may make the engine overheat or fail.



WARNING: Never use metal-reinforced line, wire, or rope, etc. These can break off and become dangerous projectiles.

There are two methods to replace the SpeedSpool® trimming line.

- · Wind the inner reel with new line
- Install a prewound inner reel

#### Winding the Inner Reel With New Line

**NOTE**: It is unnecessary to remove the bump knob to install new trimming line.

1. Cut two pieces of 0.080 inch (2.03 mm) trimming line, 10 feet (3 m) long.



**WARNING**: Always use the correct line length when installing trimming line on the unit. The line may not release properly if the line is too long.

Hold the outer spool and turn the inner reel counterclockwise to line up the arrows on the outer spool and inner reel (Fig. 16).



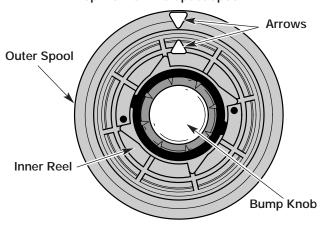


Fig. 16

- Pull old line out of the line loading and line locking holes (Figs. 17 and 18).
- Insert a piece of trimming line into one of the two eyelets in the outer spool. Push it up through the line loading hole in the inner reel (Fig. 17). Do not bend the line when inserting it into the eyelet.

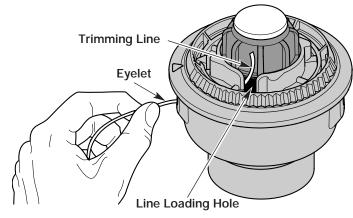


Fig. 17

5. Insert the line into the locking hole (Fig. 17). Do not push the line more than 1/2 inch (12.7 mm) into the line locking hole. When inserted correctly the line will form a small loop (Fig. 18).

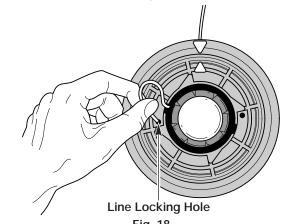


Fig. 18 -

Pull the line from the outer spool until the line is tight against the inner reel (Fig. 19).

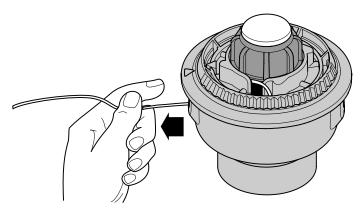
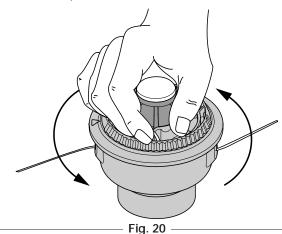


Fig. 19

- 7. Repeat procedures 4-6 with the second piece of line.
- 8. Hold the outer spool. Wind the inner reel counterclockwise until approximately four (4) inches (102 mm) of line remain (Fig. 20).

**NOTE:** Do not wind the inner reel before installing the second piece of line.



 If winding the line becomes difficult or the line jams, pull the ends of the line from the spool (Fig. 21). Continue winding the inner reel counterclockwise.

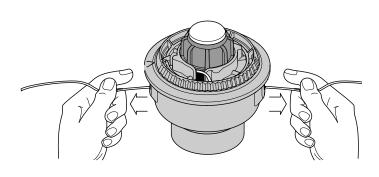
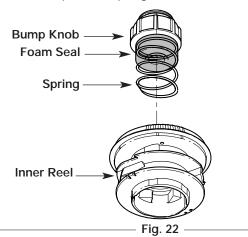


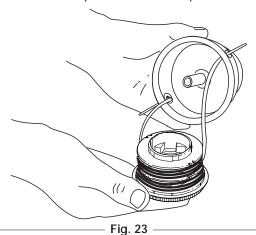
Fig. 21

#### INSTALLING A PREWOUND REEL

1. Turn the bump knob counterclockwise and remove the bump knob, spring and foam seal (Fig. 22).



- 2. Pull the old inner reel with existing line from the outer spool.
- 3. Insert the ends of the prewound inner reel line into the outer spool eyelets (Fig. 23). Push the new inner reel, arrow side up, into the outer spool.



4. Hold the inner reel in place and install the bump knob, spring and foam seal. Press down and turn the bump knob clockwise. Grasp the ends and pull firmly to release the line from the holding slots in the inner reel. (Fig. 21).

#### Releasing the Inner Reel

If the SpeedSpool® does not release line correctly, pull the ends of the line firmly from the spool (Fig. 21). If this does not release line, follow the Cleaning the SpeedSpool® instructions in the Maintenance and Repair Instructions section.

#### CLEANING THE SPEEDSPOOL®

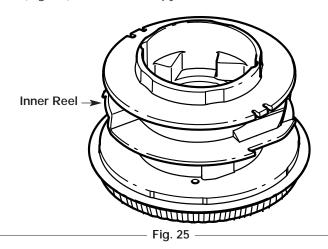
Cleaning the SpeedSpool® may be necessary:

- · To remove jammed or excess line, or
- If the SpeedSpool® becomes difficult to wind or does not operate correctly when bumping the head on the ground.
- 1. Hold the outer spool, and unscrew the bump knob counterclockwise (Fig. 24).

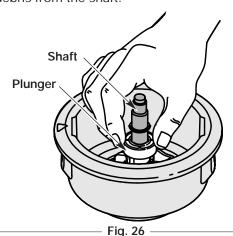


Fig. 24

- 2. Pull out the bump knob, spring and foam seal (Fig. 22).
- 3. Pull the inner reel with existing line from the outer spool (Fig. 23).
- 4. Remove any existing line from the inner reel before cleaning. Remove any debris or grass from the knob, spring, inner reel and foam seal. Wash the inner reel (Fig. 25) with warm soapy water.



 Clean the shaft and the inner surface of the outer spool. To clean the shaft underneath the plunger, press down on the plunger (Fig. 26). Remove any dirt or debris from the shaft.



**NOTE:** The inner reel must be totally dry before reinstalling it into the outer spool. Do not lubricate the inner reel or outer spool assembly.

- 6. Place the inner reel into the outer spool.
- 7. Place the bump knob, spring and foam seal into the inner reel (Fig. 22).
- 8. Press the bump knob down and tighten clockwise.
- Install new line as described in Line Installation for the SpeedSpool<sup>®</sup> in the Maintenance and Repair Instructions section.

#### SPEEDSPOOL® REPLACEMENT PARTS

Replacement Line
Replacement Line Cartridge 791-181460B
Inner Reel Spring
Foam Seal
Inner Reel
Bump Head™ Knob Assembly 791-181468B
(Bump Head™, Inner Reel, Spring, )
These SpeedSpool® replacement parts can be purchased from your local authorized dealer.

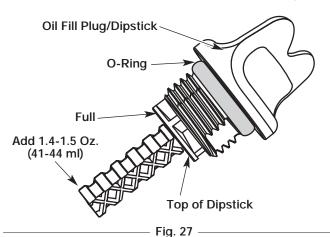
#### CHECKING THE OIL LEVEL



**CAUTION:** To prevent extensive engine wear and damage to the unit, always maintain the proper oil level in the crankcase. Never operate the unit with the oil level below the bottom of the dipstick.

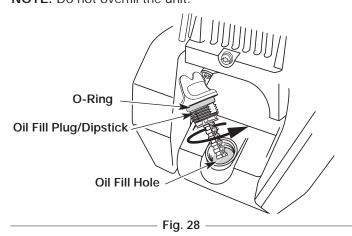
The importance of checking and maintaining the proper oil level in the crankcase cannot be overemphasized. Check oil before each use:

- 1. Stop engine and allow oil to drain into the crankcase.
- Place the unit on a flat, level surface to get a proper oil level reading.
- 3. Keep dirt, grass clippings, etc., out of the engine. Clean the area around the oil fill plug/dipstick before removing it.
- 4. Remove the oil fill plug/dipstick and wipe off oil. Reinsert it all the way back in.
- Remove the oil fill plug/dipstick and check oil level. Oil should be up to the top of the dipstick (Fig. 27).



6. If the level is low, add a small amount of oil to the oil fill hole and recheck (Fig. 27). Repeat until the oil level reaches the top of the dipstick.

NOTE: Do not overfill the unit.



**NOTE:** Make sure the O-ring is in place on the oil fill plug/dipstick when checking and changing the oil (Fig. 28).



DANGER: OVERFILLING OIL CRANKCASE MAY CAUSE SERIOUS PERSONAL INJURY! The importance of checking and maintaining the proper oil level in the crank case cannot be overemphasized. Check oil before each use and change as needed. See Changing the Oil below.

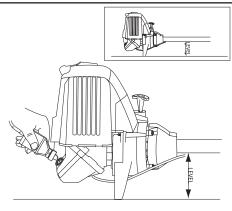


Fig. 29

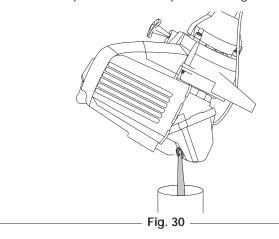
#### CHANGING THE OIL

For a new engine, change the oil after the first 10 hours of operation. Change the oil while the engine is still warm. The oil will flow freely and carry away more impurities.



**CAUTION:** Wear gloves to prevent injury when handling the unit.

- 1. Unplug spark plug wire to eliminate starting.
- 2. Remove the oil fill plug/dipstick.
- Pour the oil out of the oil fill hole and into a container by tipping the unit to a vertical position (Fig. 30). Allow ample time for complete drainage.



- Wipe up any oil residue on the unit and clean up any oil that may have spilled. Dispose of the oil according to Federal, State and Local regulations.
- Refill the crankcase with 3.4 fluid ounce (100 ml) of SAE 30 SF, SG, SH oil.

NOTE: Use the bottle and spout saved from initial use to measure the correct amount. 3.4 ounce (100 ml) is approximately to the top of the label on the bottle (Fig. 31). Check the level with the dipstick. If the level is low, add a small amount of oil and recheck (Fig. 27). Do not overfill.



Fig. 31

- 6. Replace the oil fill plug/dipstick.
- 7. Reconnect spark plug wire.

#### AIR FILTER MAINTENANCE

Cleaning the Air Filter



**WARNING:** To avoid serious personal injury, always turn your trimmer off and allow it to cool before you clean it or do any maintenance on it.

Clean and re-oil the air filter every 10 hours of operation. It is an important item to maintain. Not maintaining the air filter will **VOID** the warranty.

1. Open the air filter cover. Push the tab on the right side of the cover in, pull the air filter cover out and to the left (Fig. 32).

**NOTE**: It may be necessary to remove the fuel cap to completely remove the air filter cover

2. Remove the air filter (Fig. 32).

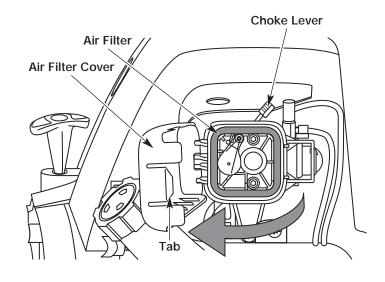


Fig. 32

3. Wash the filter in detergent and water (Fig. 33). Rinse the filter thoroughly and allow it to dry.



Fig. 33

4. Apply enough clean SAE 30 motor oil to lightly coat the filter (Fig. 34).

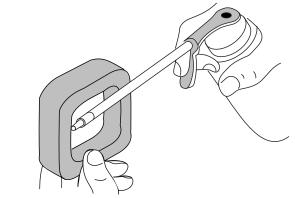
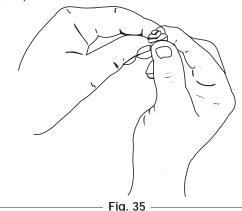


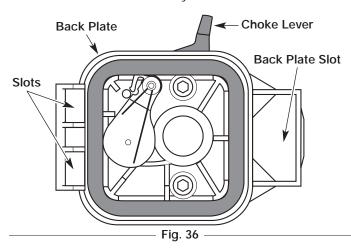
Fig. 34

Squeeze the filter to spread and remove excess oil (Fig. 36).



6. Replace the filter (Fig. 35).

**NOTE:** If the unit is operated without the air filter, you will **VOID** the warranty.



7. Reinstall the air filter cover. Position the hooks on the left side of the air filter cover into the slots at the left side of the back plate (Fig. 36).

**NOTE:** It may be necessary to remove the fuel cap to reinstall the air filter cover

- 8. Swing the cover to the right until the tab on the air filter cover snaps into place in the slot on the back plate (Fig. 36).
- 9. Replace the fuel cap, if removed.

#### CARBURETOR ADJUSTMENT

The idle speed of the engine is adjustable. An idle adjustment screw is reached though a hole in the top of the engine cover (Fig 37).

**NOTE:** Careless adjustments can seriously damage your unit. An authorized service dealer should make carburetor adjustments.

#### Check Fuel

Old fuel is usually the main reason for the unit not running properly. Drain and refill the tank with clean, fresh unleaded fuel prior to doing any adjustments. Refer to the **Oil and Fuel Information** section.

#### Clean Air Filter

The condition of the air filter is important to the operation of the unit. A dirty air filter will restrict air flow and change the air/fuel mixture. This is often mistaken for an out of adjustment carburetor. Check the condition of the air filter before adjusting the idle speed screw. Refer to Air Filter Maintenance in the Maintenance and Repair Instructions section.

#### **Adjust Idle Speed Screw**

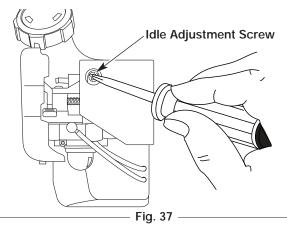


**WARNING:** The cutting attachment may be spinning during idle speed adjustment. Wear protective clothing and observe all safety instructions to prevent serious personal injury.

If after checking the fuel and cleaning the air filter the engine still will not idle, adjust the idle speed screw as follows.

- 1. Start the engine and let it run at a high idle for a minute to warm up.
- Release the throttle trigger and let the engine idle. If the engine stops, insert a small phillips or flat blade screwdriver into the hole in the engine cover (Fig. 37). Turn the idle speed screw in, clockwise, 1/8 of a turn at a time (as needed) until the engine idles smoothly.

**NOTE:** The cutting attachment should not rotate when the engine idles.



3. If the cutting attachment rotates when the engine idles, turn the idle speed screw counterclockwise 1/8 of a turn at a time (as needed), to reduce idle speed.

Checking the fuel, cleaning the air filter, and adjusting the idle speed screw should solve most engine problems.

If not and:

- The engine will not idle,
- The engine hesitates or stalls on acceleration,
- There is a loss of engine power,

have the carburetor adjusted by an authorized service dealer.



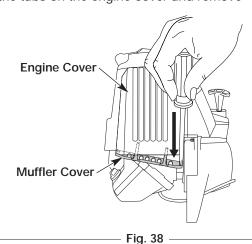
**WARNING:** When the unit is turned off make sure the cutting attachment has stopped before the unit is set down to prevent serious personal injury.

#### **ROCKER ARM CLEARANCE**

This requires disassembly of the engine. If you feel unsure or unqualified to perform this, take the unit to an authorized service center.

**NOTE:** Inspect the valve to rocker arm clearance with a feeler gauge after the first 10 hours of operation and then every 25 hours of operation thereafter.

- The engine must be cold when checking or adjusting the valve clearance.
- This task should be performed inside, in a clean, dust free area.
- 1. Remove the muffler cover by pressing down on the corner with a flat blade screwdriver (Fig. 38). Slide the notches on the sides of the muffler cover over the tabs on the engine cover and remove



2. Remove the two (2) screws on top of the engine cover with an appropriate screwdriver (Fig. 39).



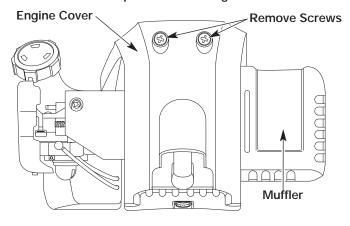
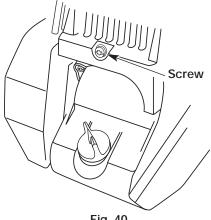


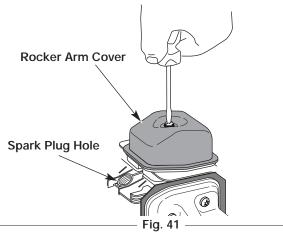
Fig. 39

3. Remove the screw behind the engine cover (Fig. 40).



- Fig. 40 —

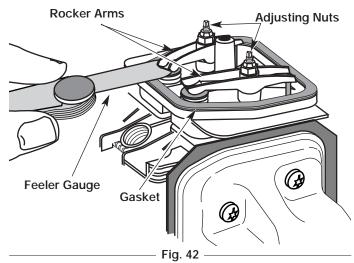
- 4. Disconnect the spark plug wire.
- 5. Clean dirt from around the spark plug. Remove the spark plug from the cylinder head by turning a 5/8 in. socket counterclockwise.
- 6. Remove the engine cover (Fig. 39).
- 7. Clean dirt from around the rocker arm cover. Remove the screw holding the rocker arm cover with a large flat blade screwdriver or Torx T25 bit (Fig. 41). Remove the rocker arm cover and gasket.



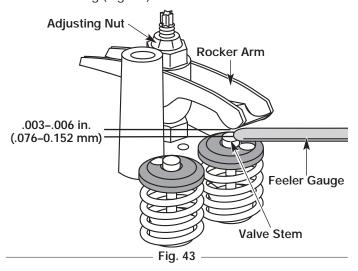
- 8. Pull the starter rope slowly to bring the piston to the top of its travel, (known as top dead center). Check that:
  - The piston is at the top of its travel while looking in the spark plug hole (Fig. 41).
  - Both rocker arms move freely, and both valves are closed.

If not, repeat this step.

 Slide the feeler gauge between the rocker arm and the valve return spring. Measure the clearance between the valve stem and rocker arm (Fig 42). Do both intake and exhaust valves.



The recommended clearance for both intake and exhaust is .003 – .006 in. (.076 – 0.152 mm). Use a standard automotive .005 in. (0.127 mm) feeler gauge. The feeler gauge should slide between the rocker arm and valve stem with a slight amount of resistance, without binding (Fig. 43).

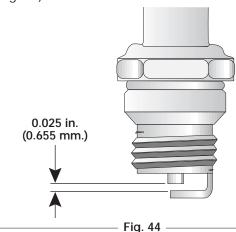


- 10. If the clearance is not within specification:
  - a. Turn the adjusting nut using a 5/16 inch (8 mm) wrench or nut driver (Fig. 42).
  - To increase clearance, turn the adjusting nut counterclockwise.
  - To decrease clearance, turn the adjusting nut clockwise.
  - b. Recheck both clearances, and adjust as necessary.
- 11. Reinstall the rocker arm cover using a new gasket. Torque the screw to 20–30 in⋅lb (2.2–3.4 N⋅m).
- NOTE: A rocker arm cover gasket, Part # 791-182099 can be purchased from your local authorized dealer.
- 12. Reinstall the engine cover. Check alignment of the cover before tightening the screws. Tighten screws.
- 13. Replace the muffler cover. Slip the long tabs on the muffler cover into the engine cover. Slide the notches on the side of the muffler cover over the tabs on the engine cover and snap into place (Fig. 38).
- 14. Check the spark plug and reinstall. See Replacing the Spark Plug in the Maintenance and Repair Instructions section.
- 15. Replace the spark plug wire.

#### REPLACING THE SPARK PLUG

Use only genuine MTD spark plugs. The correct air gap is 0.025 in. (0.655 mm.). Remove the plug after every 50 hours of operation and check its condition.

- 1. Stop the engine and allow it to cool. Grasp the plug wire firmly and pull the cap from the spark plug.
- Clean dirt from around the spark plug. Remove the spark plug from the cylinder head by turning a 5/8 in. socket counterclockwise.
- 3. Replace cracked, fouled or dirty spark plug. Set the air gap at 0.025 in. (0.655 mm.) using a feeler gauge (Fig. 44).





**CAUTION:** Do not sand blast, scrape, or clean electrodes. Grit in the engine could damage the cylinder.

4. Install a correctly gapped spark plug in the cylinder head. Tighten by turning the 5/8 in. socket clockwise until snug.

If using a torque wrench torque to;

110-120 in.•lb. (12.3-13.5 N•m).

Do not over tighten.

5. Replace the spark plug wire.

**NOTE:** A replacement spark plug Part # 791-180852 can be purchased from your local authorized dealer.

#### SPARK ARRESTOR MAINTENANCE

- Remove the muffler cover. See Rocker Arm Clearance in the Maintenance and Repair Instructions section.
- 2. With a flat blade screwdriver or Torx T20 bit, remove the screw attaching the spark arrestor cover to the muffler (Fig. 45).

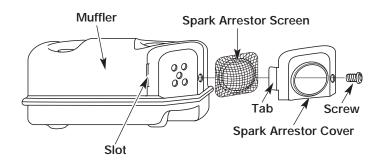


Fig. 45

- 3. Pull the tab on the spark arrestor cover out of the muffler. Remove the spark arrestor cover.
- 4. Remove the spark arrestor screen from the spark arrestor cover.
- Clean the spark arrestor screen with a wire brush, or replace.
- Reinstall the spark arrestor screen, spark arrestor cover, and screw.

NOTE: A replacement spark arrestor screen Part # 791-180890 can be purchased from your local authorized dealer.

#### **ACCESSORIES/REPLACEMENT PARTS**

4-Cycle Oil
Oil Fill Plug / Dipstick
Spark Plug
Spark Arrestor Screen
Replacement Line Cartridge791-181460B
Inner Reel Spring 791-181465B
Bump Head™ Knob Assembly 791-181468B
Fuel Cap
Shoulder Harness
EZ-Link Coupler

### **SECTION 8: CLEANING AND STORAGE**

#### **CLEANING**



**WARNING:** To avoid serious personal injury, always turn your trimmer off and allow it to cool before you clean or do any maintenance on it.

Use a small brush to clean off the outside of the unit. Do not use strong detergents. Household cleaners that contain aromatic oils such as pine and lemon, and such as kerosene, can damage plastic housing or handle. Wipe off any moisture with a soft cloth.

#### **STORAGE**

- Never store the unit with gasoline in the tank where fumes may reach an open flame or spark.
- Allow the engine to cool before storing.
- Store the unit locked up to prevent unauthorized use or damage.
- Store the unit in a dry, well ventilated area.
- · Store the unit out of the reach of children.

#### Store the unit in one of three (3) positions:

- 1. The unit hanging by the cutting attachment end.
- 2. The unit hanging by the engine.
- 3. The unit setting upright on the cutting attachment shield and engine feet.

#### LONG TERM STORAGE

If the unit will be stored for an extended time,

- Drain all gasoline from the gas tank into a container.
   Do not use gas that has been stored for more than 60 days. Dispose of the old gasoline in accordance to Federal, State, and Local regulations.
- Start the engine and allow it to run until it stalls. This ensures that all gasoline has been drained from the carburetor.
- 3. Allow the engine to cool. Remove the spark plug and put 1 oz. (30 ml) of high quality motor oil into the cylinder. Pull the starter rope slowly to distribute the oil. Reinstall the spark plug.

**NOTE:** Remove the spark plug and drain all of the oil from the cylinder before attempting to start the trimmer after storage.

- Change the oil. See Changing the Oil in the Maintenance and Repair Instructions section. Dispose of the old oil in accordance to Federal, State, and Local regulations.
- Thoroughly clean the unit and inspect for any loose or damaged parts. Repair or replace damaged parts and tighten loose screws, nuts or bolts. The unit is ready for storage.

#### **TRANSPORTING**

- Allow the engine to cool before transporting.
- Secure the unit while transporting.
- Drain the gas tank before transporting.
- Tighten gas cap before transporting.

# **SECTION 9: TROUBLESHOOTING**

CAUSE   Ignition switch is OFF   If If If If It		
Ignition switch is OFF Empty fuel tank Primer bulb wasn't pressed enough Engine flooded Use starting procedure with choke lever in the RUN position Procedure spark plug Engine flooded ROWN position Prouted spark plug ENGINE WILL NOT IDLE C A U S E A C T I O N Replace or clean the spark plug  ENGINE WILL NOT ACCELERATE C A U S E Old gasoline Prouted adjustment ENGINE WILL NOT ACCELERATE C A U S E Old gasoline Improper carburetor adjustment  ENGINE WILL NOT ACCELERATE C A U S E Old gasoline Improper carburetor adjustment  ENGINE WILL NOT ACCELERATE C A U S E Old gasoline Improper carburetor adjustment  ENGINE WILL NOT ACCELERATE C A U S E Old gasoline Improper carburetor adjustment Cutting head bound with grass Stop the engine and clean the cutting attachment Clogged spark arrestor screen ENGINE LACKS POWER OR STALLS WHEN CUTTING C A U S E Old gasoline Improper carburetor adjustment Clogged spark arrestor screen  ENGINE LACKS POWER OR STALLS WHEN CUTTING C A U S E Old gasoline Take to an authorized service dealer for carburetor adjustment Clean or replace  ENGINE LACKS POWER OR STALLS WHEN CUTTING C A U S E Old gasoline Take to an authorized service dealer for carburetor adjustment Clean or replace  ENGINE LACKS POWER OR STALLS WHEN CUTTING C A U S E Old gasoline A C T I O N Drain fuel tank / Add fresh gasoline Take to an authorized service dealer for carburetor adjustment Clean or replace  CUTTING HEAD WILL NOT ADVANCE LINE  C A U S E A C T I O N Stop the engine and clean cutting attachment Refill with new line Replace the inner reel Clean inner reel and outer spool Disassemble, remove the welded section and rewind the line Push the bump knob and pull out line until 4 inchos (102 mm) of line is outside of the cutting attachment  CUTTING LINE ADVANCES UNCONTROLLABLY C A U S E A C T I O N	ENGINE WILL NOT START	
Empty fuel tank Primer bulb wasn't pressed enough Engine flooded Use starting procedure with choke lever in the RUN position Old gasoline Prouled spark plug ENGINE WILL NOT IDLE CAUSE ACTION Air filter is plugged Old gasoline Program will Not ACCELERATE CAUSE Old gasoline Improper carburetor adjustment CAUSE ACTION Old gasoline Improper carburetor adjustment ENGINE WILL NOT ACCELERATE CAUSE CAUSE Old gasoline Improper carburetor adjustment  ENGINE WILL NOT ACCELERATE CAUSE Old gasoline Improper carburetor adjustment Cutting head bound with grass Dirty air filter Clogged spark arrestor screen ENGINE LACKS POWER OR STALLS WHEN CUTTING CAUSE Old gasoline Improper carburetor adjustment Clean or replace  ENGINE LACKS POWER OR STALLS WHEN CUTTING CAUSE CAUSE ACTION Drain gas tank / Add fresh gasoline Take to an authorized service dealer for carburetor adjustment Clean or replace the air filter Clean or replace the air filter Clean or replace the air filter Clean or replace  ENGINE LACKS POWER OR STALLS WHEN CUTTING CAUSE ACTION Oran five tank / Add fresh gasoline Take to an authorized service dealer for carburetor adjustment Clean or replace  CUTTING HEAD WILL NOT ADVANCE LINE CAUSE ACTION Cutting head bound with grass Cutting head out of line Inner reel bound up Cutting head out of line Inner reel bound up Cutting head dirty Clean inner reel and outer spool Clean inner reel and outer spool Disassemble, remove the welded section and rewind the line Disassemble, remove the welded section and rewind the line Disassemble and rewind the line Disassemble and rewind the line Disassemble and rewind the line Push the bump knob and pull out line until 4 inches (102 mm) of line is outside of the cutting attachment CUTTING LINE ADVANCES UNCONTROLLABLY CAUSE ACTION		
Primer bulb wasn't pressed enough Engine flooded Use starting procedure with choke lever in the RUN position Drain fuel tank / Add fresh gasoline Fouled spark plug ENGINE WILL NOT IDLE C A U S E ACTION Air filter is plugged Old gasoline Bropper carburetor adjustment CAUSE CAUSE ACTION Replace or clean the air filter Drain fuel tank / Add fresh gasoline Improper carburetor adjustment ENGINE WILL NOT ACCELERATE C A U S E Old gasoline Improper carburetor adjustment  ENGINE WILL NOT ACCELERATE C A U S E Old gasoline Improper carburetor adjustment Cutting head bound with grass Stop the engine and clean the cutting attachment Clean or replace ENGINE LACKS POWER OR STALLS WHEN CUTTING C A U S E Old gasoline Improper carburetor adjustment Clogged spark arrestor screen ENGINE LACKS POWER OR STALLS WHEN CUTTING C A U S E Old gasoline Improper carburetor adjustment Clogged spark arrestor screen Clogged spark arrestor screen CUTTING HEAD WILL NOT ADVANCE LINE C A U S E CUTTING HEAD WILL NOT ADVANCE LINE C A U S E CUTTING HEAD WILL NOT ADVANCE LINE C A U S E CUTTING Head bound with grass Cutting head bound with grass Cutting head out of line Inner reel bound up Cutting head out of line Inner reel bound up Cutting head out of line Inner reel bound up Cutting head out of line Inner reel bound up Cutting head out of line Inner reel bound up Cutting head out of line Inner reel bound up Clean inner reel and outer spool Disassemble, remove the welded section and rewind the line Disassemble and rewind the line Pusch the bump knob and pull out line until 4 inches (102 mm) of line is outside of the cutting altachment CUTTING LINE ADVANCES UNCONTROLLABLY C A U S E	Ignition switch is OFF	Turn switch to ON
Engine flooded  Old gasoline  Fouled spark plug  A C T I O N  Replace or clean the spark plug  Replace or clean the air filter  Drain fuel tank / Add fresh gasoline  Improper carburetor adjustment  FOULED Spark Plug S	Empty fuel tank	Fill fuel tank
RUN position Old gasoline Fouled spark plug  ENGINE WILL NOT IDLE  C A U S E Alr filter is plugged Old gasoline Improper carburetor adjustment ENGINE WILL NOT ACCELERATE C A U S E A C T I O N Replace or clean the air filter Old gasoline Improper carburetor adjustment ENGINE WILL NOT ACCELERATE C A U S E Old gasoline Improper carburetor adjustment Improper carburetor adjustment Old gasoline Improper carburetor adjustment Take to an authorized service dealer for carburetor adjustment Cutting head bound with grass Stop the engine and clean the cutting attachment Clean or replace the air filter Clean or replace the air filter Claged spark arrestor screen ENGINE LACKS POWER OR STALLS WHEN CUTTING C A U S E Old gasoline Improper carburetor adjustment Take to an authorized service dealer for carburetor adjustment Clogged spark arrestor screen Clag or replace  ENGINE LACKS POWER OR STALLS WHEN CUTTING C A U S E Old gasoline Take to an authorized service dealer for carburetor adjustment Clogged spark arrestor screen Clean or replace  CUTTING HEAD WILL NOT ADVANCE LINE C A U S E Cutting head bound with grass Cutting head bound with grass Cutting head bound with grass Cutting head dirty Clean inner reel and outer spool Disassemble, remove the welded section and rewind the line Push the bump knob and pull out line untill 4 inches (102 mm) of line is outside of the cutting attachment CUTTING LINE ADVANCES UNCONTROLLABLY C A U S E A C T I O N	Primer bulb wasn't pressed enough	Press primer bulb fully and slowly 5-7 times
Replace or clean the spark plug   Replace or clean the spark plug	Engine flooded	
ENGINE WILL NOT IDLE  C A U S E Air filter is plugged Old gasoline Improper carburetor adjustment ENGINE WILL NOT ACCELERATE C A U S E Old gasoline Improper carburetor adjustment  ENGINE WILL NOT ACCELERATE C A U S E Old gasoline Improper carburetor adjustment Improper carburetor adjustment Improper carburetor adjustment Cutting head bound with grass Stop the engine and clean the cutting attachment Clean or replace the air filter Clean or replace the air filter Clean or replace ENGINE LACKS POWER OR STALLS WHEN CUTTING C A U S E Old gasoline Improper carburetor adjustment Improper carburetor adjustment Clean or replace  ENGINE LACKS POWER OR STALLS WHEN CUTTING C A U S E Old gasoline Improper carburetor adjustment Clogged spark arrestor screen Clogged spark arrestor screen CUTTING HEAD WILL NOT ADVANCE LINE C A U S E Cutting head bound with grass Cutting head bound with grass Cutting head dut of line Inner reel bound up Cutting head dirty Clean inner reel and outer spool Disassemble, remove the welded section and rewind the line Disassemble, remove the welded section and rewind the line Disassemble and rewind the line	Old gasoline	Drain fuel tank / Add fresh gasoline
ACTION Air filter is plugged Old gasoline Drain fuel tank / Add fresh gasoline Improper carburetor adjustment  ENGINE WILL NOT ACCELERATE  C A U S E Old gasoline Improper carburetor adjustment  Engine with part of the service of th	Fouled spark plug	Replace or clean the spark plug
Air filter is plugged Old gasoline Improper carburetor adjustment  CAUSE Old gasoline Improper carburetor adjustment  ENGINE WILL NOT ACCELERATE  CAUSE Old gasoline Improper carburetor adjustment Improper carburetor adjustment Cutting head bound with grass Olting head bound with grass Old gasoline Improper carburetor adjustment Cutting head bound with grass Stop the engine and clean the cutting attachment Clean or replace ENGINE LACKS POWER OR STALLS WHEN CUTTING CAUSE Old gasoline Improper carburetor adjustment Clogged spark arrestor screen  ENGINE LACKS POWER OR STALLS WHEN CUTTING CAUSE Old gasoline Improper carburetor adjustment Clogged spark arrestor screen  CUTTING HEAD WILL NOT ADVANCE LINE CAUSE CUtting head bound with grass Cutting head bound with grass Cutting head out of line Inner reel bound up Cutting head dirty Clean inner reel and outer spool Disassemble, remove the welded section and rewind the line Disassemble and rewind the line Not enough line is exposed  ACTION CUTTING LINE ADVANCES UNCONTROLLABLY CAUSE ACTION  CUTTING LINE ADVANCES UNCONTROLLABLY CAUSE ACTION  CUTTING LINE ADVANCES UNCONTROLLABLY CAUSE ACTION  CUTTING LINE ADVANCES UNCONTROLLABLY CAUSE ACTION  CUTTING LINE ADVANCES UNCONTROLLABLY CAUSE ACTION	ENGINE WILL NOT IDLE	
Old gasoline Improper carburetor adjustment  ENGINE WILL NOT ACCELERATE  C A U S E Old gasoline Improper carburetor adjustment  Drain gas tank / Add fresh gasoline Improper carburetor adjustment  Cutting head bound with grass Dirty air filter Clogged spark arrestor screen  ENGINE LACKS POWER OR STALLS WHEN CUTTING  C A U S E Old gasoline Improper carburetor adjustment  C Usting head bound with grass Dirty air filter Clogged spark arrestor screen  ENGINE LACKS POWER OR STALLS WHEN CUTTING  C A U S E Old gasoline Improper carburetor adjustment Clogged spark arrestor screen  C UTTING HEAD WILL NOT ADVANCE LINE  C A U S E C Utting head bound with grass Cutting head out of line Inner reel bound up Cutting head out of line Inner reel bound up Cutting head dirty Line welded Disassemble, remove the welded section and rewind the line Line twisted when refilled Not enough line is exposed  Push the bump knob and pull out line until 4 inches (102 mm) of line is outside of the cutting attachment CUTTING LINE ADVANCES UNCONTROLLABLY C A U S E CUTTING LINE ADVANCES UNCONTROLLABLY C A U S E CUTTING LINE ADVANCES UNCONTROLLABLY C A U S E CUTTING LINE ADVANCES UNCONTROLLABLY C A U S E CUTTING LINE ADVANCES UNCONTROLLABLY C A U S E CUTTING LINE ADVANCES UNCONTROLLABLY	CAUSE	ACTION
Improper carburetor adjustment  ENGINE WILL NOT ACCELERATE  C A U S E Old gasoline Improper carburetor adjustment Cutting head bound with grass Dirty air filter Clogged spark arrestor screen ENGINE LACKS POWER OR STALLS WHEN CUTTING  C A U S E Old gasoline Improper carburetor adjustment  C A U S E C A U S E C A U S E C A U S E C A U S E C A U S E C A U S E C A U S E C A U S E C C Guan or replace Engline Improper carburetor adjustment C a U S E C A C T I O N Stop the engine and clean cutting attachment Refill with new line Replace the inner reel Inner reel bound up Replace the inner reel C Lien inner reel and outer spool D is assemble, remove the welded section and rewind the line D is assemble and rewind the line Not enough line is exposed  P ush the bump knob and pull out line until 4 inches (102 mm) of line is outside of the c C UTTING LINE ADVANCES UNCONTROLLABLY C A U S E A C T I O N	Air filter is plugged	Replace or clean the air filter
ENGINE WILL NOT ACCELERATE  C A U S E Old gasoline Improper carburetor adjustment Cutting head bound with grass Dirty air filter Clogged spark arrestor screen ENGINE LACKS POWER OR STALLS WHEN CUTTING C A U S E Old gasoline Improper carburetor adjustment Clean or replace  ENGINE LACKS POWER OR STALLS WHEN CUTTING C A U S E Old gasoline Improper carburetor adjustment Clogged spark arrestor screen  ENGINE LACKS POWER OR STALLS WHEN CUTTING C A U S E Old gasoline Improper carburetor adjustment Clogged spark arrestor screen Clean or replace CUTTING HEAD WILL NOT ADVANCE LINE C A U S E Cutting head bound with grass Cutting head out of line Inner reel bound up Refill with new line Refill with new line Replace the inner reel Clean inner reel and outer spool Disassemble, remove the welded section and rewind the line Disassemble and rewind the line Disassemble and rewind the line Push the bump knob and pull out line until 4 inches (102 mm) of line is outside of the cutting attachment CUTTING LINE ADVANCES UNCONTROLLABLY C A U S E A C T I O N A C T I O N Clean inner reel and outer spool Disassemble, remove the welded section and rewind the line Disassemble and rewind the line Push the bump knob and pull out line until 4 inches (102 mm) of line is outside of the cutting attachment	Old gasoline	Drain fuel tank / Add fresh gasoline
CAUSE Old gasoline Improper carburetor adjustment Cutting head bound with grass Dity air filter Clogged spark arrestor screen ENGINE LACKS POWER OR STALLS WHEN CUTTING CAUSE Old gasoline Improper carburetor adjustment  Carburetor adjustment  CAUSE Old gasoline  ENGINE LACKS POWER OR STALLS WHEN CUTTING CAUSE Old gasoline Improper carburetor adjustment Clogged spark arrestor screen  ENGINE LACKS POWER OR STALLS WHEN CUTTING CAUSE Old gasoline Improper carburetor adjustment Clogged spark arrestor screen  Clogged spark arrestor screen Clogged spark arrestor screen  CUTTING HEAD WILL NOT ADVANCE LINE CAUSE  CAUSE ACTION  Stop the engine and clean cutting attachment Refill with new line Inner reel bound up Replace the inner reel Cutting head dirty Clean inner reel and outer spool Disassemble, remove the welded section and rewind the line Disassemble and rewind the line Not enough line is exposed  CUTTING LINE ADVANCES UNCONTROLLABLY CAUSE  ACTION  ACTION  ACTION  Drain fuel tank / Add fresh gasoline ACTION  ACTION  Clean or replace  ACTION  Stop the engine and clean cutting attachment Clean inner reel and outer spool Disassemble, remove the welded section and rewind the line Push the bump knob and pull out line until 4 inches (102 mm) of line is outside of the cutting attachment  CUTTING LINE ADVANCES UNCONTROLLABLY  CAUSE  ACTION	Improper carburetor adjustment	Adjust per instruction
Old gasoline Improper carburetor adjustment Cutting head bound with grass Dirty air filter Clogged spark arrestor screen ENGINE LACKS POWER OR STALLS WHEN CUTTING CAUSE Old gasoline Improper carburetor adjustment Clogged spark arrestor screen  ENGINE LACKS POWER OR STALLS WHEN CUTTING  CAUSE Old gasoline Improper carburetor adjustment Clogged spark arrestor screen  Clean or replace  ACTION Drain fuel tank / Add fresh gasoline Take to an authorized service dealer for carburetor adjustment Clogged spark arrestor screen Clean or replace  CUTTING HEAD WILL NOT ADVANCE LINE CAUSE CUtting head bound with grass Cutting head bound with grass Cutting head out of line Inner reel bound up Replace the inner reel Clean inner reel and outer spool Disassemble, remove the welded section and rewind the line Line twisted when refilled Not enough line is exposed  Push the bump knob and pull out line until 4 inches (102 mm) of line is outside of the cutting attachment CUTTING LINE ADVANCES UNCONTROLLABLY CAUSE  ACTION	ENGINE WILL NOT ACCELERATE	
Improper carburetor adjustment Cutting head bound with grass Dirty air filter Clogged spark arrestor screen  ENGINE LACKS POWER OR STALLS WHEN CUTTING C A U S E Old gasoline Improper carburetor adjustment Clogged spark arrestor screen  ENGINE HEAD WILL NOT ADVANCE LINE C A U S E C Utting head bound with grass Cutting head bound with grass Cutting head out of line Inner reel bound up C Cutting head dirty Line welded Line twisted when refilled Not enough line is exposed  Take to an authorized service dealer for carburetor adjustment Clean or replace  A C T I O N Stop the engine and clean cutting attachment Refill with new line Replace the inner reel Clean inner reel and outer spool Disassemble, remove the welded section and rewind the line Not enough line is exposed  A C T I O N Stop the engine and clean cutting attachment Refill with new line Replace the inner reel Disassemble and rewind the line Push the bump knob and pull out line until 4 inches (102 mm) of line is outside of the cutting attachment  CUTTING LINE ADVANCES UNCONTROLLABLY C A U S E  A C T I O N  A C T I O N  Stop the engine and clean cutting attachment Refill with new line Replace the inner reel Disassemble, remove the welded section and rewind the line Push the bump knob and pull out line until 4 inches (102 mm) of line is outside of the cutting attachment	CAUSE	ACTION
Cutting head bound with grass  Dirty air filter  Clogged spark arrestor screen  ENGINE LACKS POWER OR STALLS WHEN CUTTING  C A U S E  Old gasoline  Improper carburetor adjustment  Clogged spark arrestor screen  Clogged spark arrestor screen  Mac T I O N  Drain fuel tank / Add fresh gasoline  Take to an authorized service dealer for carburetor adjustment  Clogged spark arrestor screen  Clogged spark arrestor screen  CUTTING HEAD WILL NOT ADVANCE LINE  C A U S E  Cutting head bound with grass  Cutting head out of line  Inner reel bound up  Cutting head dirty  Line welded  Disassemble, remove the welded section and rewind the line  Not enough line is exposed  CUTTING LINE ADVANCES UNCONTROLLABLY  C A U S E  A C T I O N  Stop the engine and clean cutting attachment  Refill with new line  Replace the inner reel  Disassemble, remove the welded section and rewind the line  Push the bump knob and pull out line until 4 inches (102 mm) of line is outside of the cutting attachment  CUTTING LINE ADVANCES UNCONTROLLABLY  C A U S E  A C T I O N  A C T I O N  Stop the engine and clean cutting attachment  Clean inner reel and outer spool  Disassemble, remove the welded section and rewind the line  Disassemble and rewind the line  Push the bump knob and pull out line until 4 inches (102 mm) of line is outside of the cutting attachment	Old gasoline	Drain gas tank / Add fresh gasoline
Dirty air filter Clogged spark arrestor screen  ENGINE LACKS POWER OR STALLS WHEN CUTTING  C A U S E Old gasoline Improper carburetor adjustment Clogged spark arrestor screen  CUTTING HEAD WILL NOT ADVANCE LINE  C A U S E Cutting head bound with grass Cutting head out of line Inner reel bound up Cutting head dirty Line welded Line twisted when refilled Not enough line is exposed  CUTTING LINE ADVANCES UNCONTROLLABLY  C A U S E Cutting LINE A C T I O N Clean or replace  A C T I O N Stop the engine and clean cutting attachment Refill with new line Replace the inner reel Clean inner reel and outer spool Disassemble, remove the welded section and rewind the line Push the bump knob and pull out line until 4 inches (102 mm) of line is outside of the cutting attachment	Improper carburetor adjustment	
Clean or replace  ENGINE LACKS POWER OR STALLS WHEN CUTTING  C A U S E Old gasoline Improper carburetor adjustment Clogged spark arrestor screen CUTTING HEAD WILL NOT ADVANCE LINE  C A U S E Cutting head bound with grass Cutting head out of line Inner reel bound up Cutting head dirty Line welded Line twisted when refilled Not enough line is exposed  CUTTING LINE ADVANCES UNCONTROLLABLY C A U S E Cutting head out of line Line twisted when refilled  Not enough line is exposed  CUTTING LINE ADVANCES UNCONTROLLABLY C A U S E A C T I O N Stop the engine and clean cutting attachment Refill with new line Replace the inner reel Clean inner reel and outer spool Disassemble, remove the welded section and rewind the line Push the bump knob and pull out line until 4 inches (102 mm) of line is outside of the cutting attachment	Cutting head bound with grass	Stop the engine and clean the cutting attachment
ENGINE LACKS POWER OR STALLS WHEN CUTTING  C A U S E  Old gasoline  Improper carburetor adjustment  Clogged spark arrestor screen  CUTTING HEAD WILL NOT ADVANCE LINE  C A U S E  Cutting head bound with grass  Cutting head out of line  Inner reel bound up  Cutting head dirty  Line welded  Line twisted when refilled  Not enough line is exposed  CUTTING LINE ADVANCES UNCONTROLLABLY  C A U S E  A C T I O N  Stop the engine and clean cutting attachment  Refill with new line  Replace the inner reel  Disassemble, remove the welded section and rewind the line  Push the bump knob and pull out line until 4 inches (102 mm) of line is outside of the cutting attachment  CUTTING LINE ADVANCES UNCONTROLLABLY  C A U S E  A C T I O N	Dirty air filter	Clean or replace the air filter
CAUSE Old gasoline Improper carburetor adjustment Clogged spark arrestor screen CUTTING HEAD WILL NOT ADVANCE LINE CAUSE Cutting head bound with grass Cutting head out of line Inner reel bound up Cutting head dirty Citting head dirty Citting head dirty Citting head dirty Citting head wint grass Cutting head dirty Citting head bound with grass ACTION Citting head cealer for carburete adjustment Citting head cean cutting attachment Citting head bound with grass ACTION Citting head dirty ACTION Citting head bound with grass ACTION Citting head dirty ACTION Citting head dirty ACTION Citting head bound with grass ACTION Citting head dirty ACTION Citting head bound with grass ACTION	Clogged spark arrestor screen	Clean or replace
CAUSE Old gasoline Improper carburetor adjustment Clogged spark arrestor screen CUTTING HEAD WILL NOT ADVANCE LINE CAUSE Cutting head bound with grass Cutting head out of line Inner reel bound up Cutting head dirty Citting head dirty Citting head dirty Citting head dirty Citting head wint grass Cutting head dirty Citting head bound with grass ACTION Citting head cealer for carburete adjustment Citting head cean cutting attachment Citting head bound with grass ACTION Citting head dirty ACTION Citting head bound with grass ACTION Citting head dirty ACTION Citting head dirty ACTION Citting head bound with grass ACTION Citting head dirty ACTION Citting head bound with grass ACTION	ENGINE LACKS POWER OR STALLS W	VHEN CUTTING
Improper carburetor adjustment  Clogged spark arrestor screen  CUTTING HEAD WILL NOT ADVANCE LINE  C A U S E  Cutting head bound with grass  Cutting head out of line  Inner reel bound up  Cutting head dirty  Line welded  Line twisted when refilled  Not enough line is exposed  CUTTING LINE ADVANCES UNCONTROLLABLY  C A U S E  A C T I O N  Stop the engine and clean cutting attachment  Refill with new line  Replace the inner reel  Clean inner reel and outer spool  Disassemble, remove the welded section and rewind the line  Push the bump knob and pull out line until 4 inches (102 mm) of line is outside of the cutting attachment  CUTTING LINE ADVANCES UNCONTROLLABLY  C A U S E  A C T I O N		
Clogged spark arrestor screen  CUTTING HEAD WILL NOT ADVANCE LINE  CAUSE  Cutting head bound with grass  Cutting head out of line Inner reel bound up  Cutting head dirty  Line welded  Line twisted when refilled  Not enough line is exposed  CUTTING LINE ADVANCES UNCONTROLLABLY  CAUSE  Carburetor adjustment Clean or replace  A C T I O N  A C T I O N  A C T I O N  A C T I O N  Stop the engine and clean cutting attachment Refill with new line Replace the inner reel Clean inner reel and outer spool Disassemble, remove the welded section and rewind the line Push the bump knob and pull out line until 4 inches (102 mm) of line is outside of the cutting attachment  CUTTING LINE ADVANCES UNCONTROLLABLY CAUSE  A C T I O N	Old gasoline	Drain fuel tank / Add fresh gasoline
CUTTING HEAD WILL NOT ADVANCE LINE  C A U S E  Cutting head bound with grass  Cutting head out of line  Inner reel bound up  Cutting head dirty  Line welded  Line twisted when refilled  Not enough line is exposed  CUTTING LINE ADVANCES UNCONTROLLABLY  C A U S E  A C T I O N  Stop the engine and clean cutting attachment  Refill with new line  Replace the inner reel  Clean inner reel and outer spool  Disassemble, remove the welded section and rewind the line  Disassemble and rewind the line  Push the bump knob and pull out line until 4 inches (102 mm) of line is outside of the cutting attachment  C A U S E  A C T I O N	Improper carburetor adjustment	
CAUSE Cutting head bound with grass Cutting head out of line Inner reel bound up Cutting head dirty Cutting head dirty Ciean inner reel and outer spool Line welded Disassemble, remove the welded section and rewind the line Line twisted when refilled Not enough line is exposed  CUTTING LINE ADVANCES UNCONTROLLABLY CAUSE  ACTION  ACTION  ACTION	Clogged spark arrestor screen	Clean or replace
CAUSE Cutting head bound with grass Cutting head out of line Inner reel bound up Cutting head dirty Cutting head dirty Ciean inner reel and outer spool Line welded Disassemble, remove the welded section and rewind the line Line twisted when refilled Not enough line is exposed  CUTTING LINE ADVANCES UNCONTROLLABLY CAUSE  ACTION  ACTION  ACTION	CUTTING HEAD WILL NOT ADVANCE	LINE
Cutting head out of line Inner reel bound up Cutting head dirty Ciean inner reel and outer spool Ciean inner reel and outer spool Disassemble, remove the welded section and rewind the line Ciean inner reel and outer spool Disassemble and rewind the line Disassemble and rewind the line  Not enough line is exposed  Cutting Line Advances uncontrollably Cause  Action		
Inner reel bound up  Cutting head dirty  Line welded  Clean inner reel and outer spool  Disassemble, remove the welded section and rewind the line  Line twisted when refilled  Not enough line is exposed  CUTTING LINE ADVANCES UNCONTROLLABLY  CAUSE  Replace the inner reel  Clean inner reel and outer spool  Disassemble, remove the welded section and rewind the line  Disassemble and rewind the line  Push the bump knob and pull out line until 4 inches (102 mm) of line is outside of the cutting attachment  CAUSE  ACTION	Cutting head bound with grass	Stop the engine and clean cutting attachment
Cutting head dirty  Line welded  Disassemble, remove the welded section and rewind the line  Line twisted when refilled  Not enough line is exposed  Push the bump knob and pull out line until 4 inches (102 mm) of line is outside of the cutting attachment  CUTTING LINE ADVANCES UNCONTROLLABLY  CAUSE  ACTION	Cutting head out of line	Refill with new line
Cutting head dirty  Line welded  Disassemble, remove the welded section and rewind the line  Line twisted when refilled  Not enough line is exposed  Push the bump knob and pull out line until 4 inches (102 mm) of line is outside of the cutting attachment  CUTTING LINE ADVANCES UNCONTROLLABLY  CAUSE  ACTION	Inner reel bound up	Replace the inner reel
Line twisted when refilled  Not enough line is exposed  Not enough line is exposed  Push the bump knob and pull out line until 4 inches (102 mm) of line is outside of the cutting attachment  CUTTING LINE ADVANCES UNCONTROLLABLY  CAUSE  ACTION	Cutting head dirty	
Not enough line is exposed  Push the bump knob and pull out line until 4 inches (102 mm) of line is outside of the cutting attachment  CUTTING LINE ADVANCES UNCONTROLLABLY  CAUSE  ACTION		Disassemble, remove the welded section
4 inches (102 mm) of line is outside of the cutting attachment  CUTTING LINE ADVANCES UNCONTROLLABLY  CAUSE  ACTION	Line twisted when refilled	Disassemble and rewind the line
CAUSE ACTION	Not enough line is exposed	4 inches (102 mm) of line is outside of the
	CUTTING LINE ADVANCES UNCONTR	OLLABLY
Oil in cutting head Clean the cutting attachment	CAUSE	ACTION
	Oil in cutting head	Clean the cutting attachment

If further assistance is required, contact your authorized service dealer.

# **SECTION 10: SPECIFICATIONS**

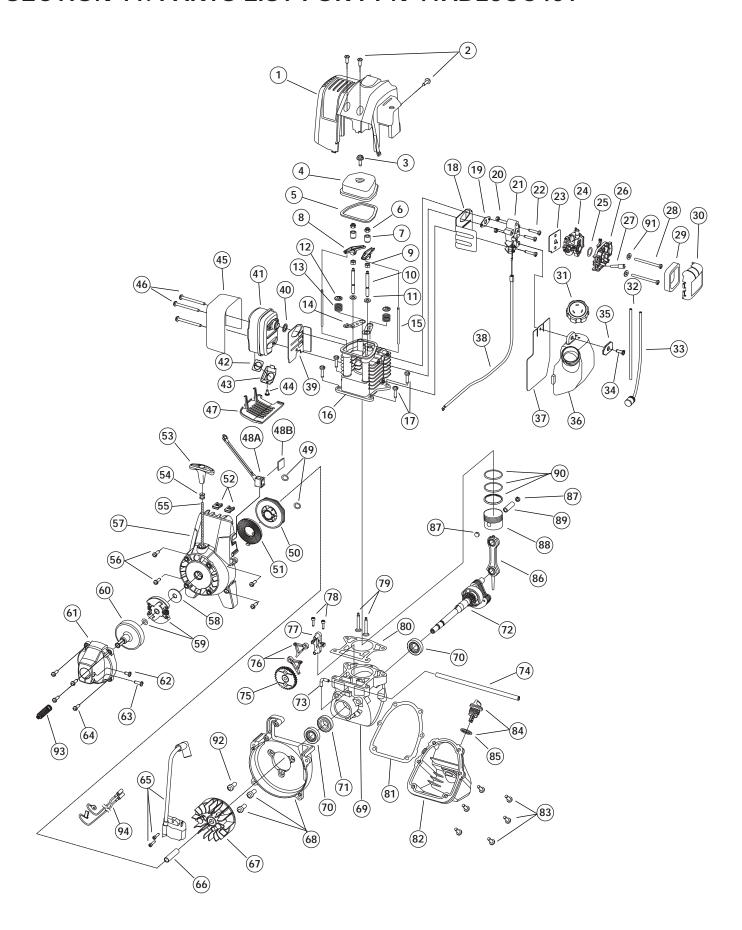
### **ENGINE**

ENGINE	
Engine Type	
Displacement	1.6 cu. in. (26.2 cc)
Clutch Type	Centrifugal
Operating RPM	7200-8300 rpm
Idle Speed RPM	3000-4500 rpm
Operating Switch Type	Electronic Rocker Switch
Valve clearance (intake and exhaust)	003–.006 in. (.076–.0152 mm)
Spark Plug Gap	
Lubrication	SAE 30 Oil
Crankcase Oil Capacity	3.4 oz (100 ml)
Fuel	Unleaded
Carburetor	Diaphragm, All-Position
Starter	Auto Rewind
Muffler	Baffled with Guard
Throttle	
Fuel Tank Capacity	12 oz (355 ml)
Fuel Tank	HD Polyethylene

### **DRIVE SHAFT & CUTTING ATTACHMENT**

Drive Shaft Housing
Throttle Control Finger-Tip Trigger
Unit Weight (No Fuel, with J-handle, Cutting attachment shield and Cutting attachment) 13.5 lbs (6.13 kg)
Cutting Mechanism
Line Spool
Line Spool Diameter
Trimming Line Diameter 0.080 inches (2.03 mm)
Cutting Path Diameter

# SECTION 11: PARTS LIST FOR PPN 41AD26CC401

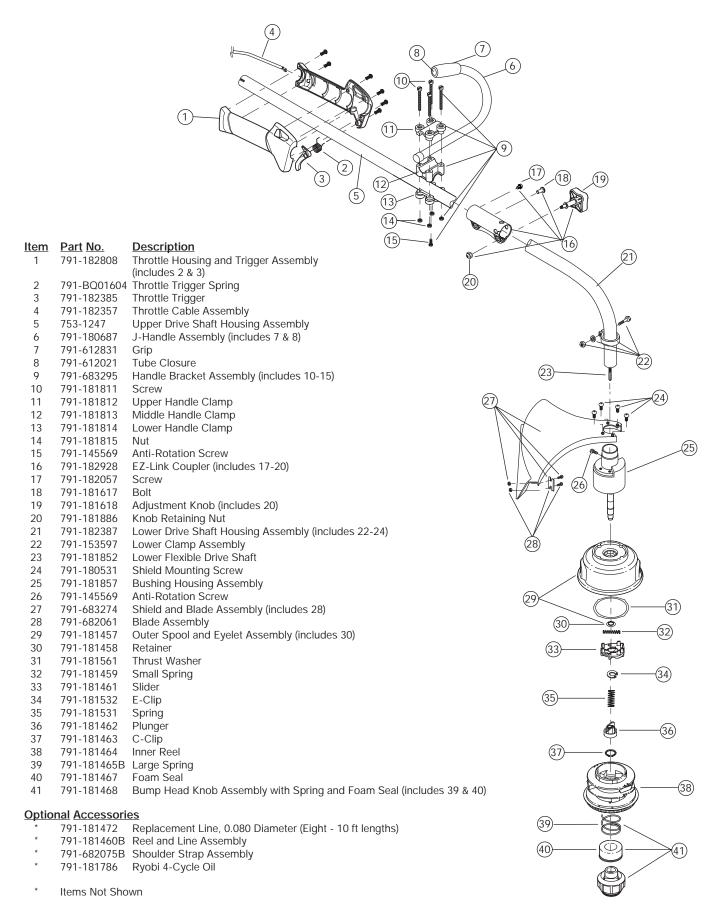


# SECTION 11: PARTS LIST FOR PPN 41AD26CC401

Itom	Dort No	Description		D. J.M.	Paradalla.
<u>Item</u>	Part No.	Description Engine Cover	<u>Item</u>	Part No.	<u>Description</u>
1 2	753-04083 791-182339	Engine Cover Engine Cover Screws	49	791-181247	Pulley Retainer Assembly
		Valve Cover Screw	50	753-1199	Recoil Pulley
3	791-181025	Valve Cover Screw Valve Cover	51	753-1236	Recoil Spring
4	791-182098		52	791-182366	Nut Clip
5	791-182099	Valve Cover Gasket	53	791-181079	Pull Handle
6	791-182340	Rocker Adjustment Nut	54	791-611061	Rope Guide
7	791-182101	Rocker Arm Pivot	55	791-613103	Rope
8	791-182100	Rocker Arm	56	791-181020	Starter Housing Screw
9	791-181034	Hex Nut	57	753-04127	Starter Housing Assembly (includes 49-56)
10	791-182341	Rocker Arm Stud	58	791-182368	Clutch Washer
11	791-181035	Washer	59	753-1238	Clutch with Spacer
12	791-182103	Valve Spring Retainer	60	791-153592	Clutch Drum
13	791-181038	Valve Spring	61	792-10501	Clutch Cover
14	791-182102	Push Rod Guide	62	791-145569	Anti-Rotation Screw
15	791-181033	Push Rod	63	791-181345	Screw
16	791-182745	Cylinder Head	64	791-181345	Clutch Cover Screw
17	791-182344	Cylinder Screw	65	791-182370	Ignition Module with Screws
18	753-1226	Intake Baffle	66	791-181065	Spacer
19	791-182749	Carburetor Mount Gasket	67	791-181867	Flywheel
20	791-181034	Nut	68	791-182371	Shroud Assembly with Screws (includes 93)
21	791-182347	Carburetor Mount (includes 20)	69	791-182376	Crankcase Assembly (includes 70-74)
22	791-182348	Carburetor Mount Screw	70	791-610309	Oil Seal
23	791-182732	Carburetor Gasket	71	791-182372	Bearing
24	753-1225	Carburetor with Primer	72	791-182380	Crankshaft
25	791-181751	O-Ring, Carburetor	73	791-182375	90° Elbow
26	791-182350	Air Filter Assembly (includes 29 & 30)	74	791-182379	Breather Hose
27	791-182409	Washer	75	791-181015	Cam Gear
28	791-181750	Air Filter Mounting Screw	76	753-1242	Cam Follower
29	791-181757	Air Filter	77	791-181013	Cam Bracket
30	791-182351	Air Filter Cover	78	791-181012	Cam Bracket Screw
31	791-182271	Fuel Cap	79	791-181040	Valves, Intake and Exhaust
32	791-182352	Fuel Return Line	80	791-182374	Cylinder Gasket
33	791-182353	Fuel Pick-Up Line with Filter	81	791-181018	Oil Pan Gasket
34	791-181080	Screw	82	791-182377	Oil Pan (includes 81 & 83)
35	791-182354	Washer	83	791-181020	Oil Pan Screw
36	791-182355	Fuel Tank Assembly (includes 31-33)	84	791-182378	Dipstick Assembly (includes 85)
37	791-182356	Fuel Tank Shield	85	791-182290	O-Ring
38	753-1231	Throttle Cable	86	791-181009	Connecting Rod
39	753-1232	Muffler Baffle	87	791-181008	Wrist Pin Button
40	791-181048	Muffler Gasket	88	753-1243	Piston
41	791-182359	Muffler (includes 40, 42-44)	89	791-181006	Wrist Pin
42	791-180890	Spark Arrestor Screen	90	791-181005	Piston Ring Set
43	791-181045	Screen Cover	91	791-182409	Washer
44	791-181046	Screw	92	791-181861	Screw
45	753-1233	Muffler Shield	93	791-612468	Compression Spring
46	791-182361	Muffler Mounting Screw	94	791-182365	Coil Wire Assembly
47	753-04092	Muffler Cover	*	791-180852B	Spark Plug
48A	791-182365	Switch with Wires (Used with Version A Grip)	*	791-182744	Short Block Assembly (includes 3-17, 69-90)
48B	791-182537	Grommet (Used with Version B Grip)	*	791-182745	Cylinder Assembly (includes 9-11, 14, 16 & 80)
			*	791-180142	Starter Pawl Repair Kit
			*	791-683394	Carburetor Repair Kit

<sup>\*</sup> Parts not shown

### SECTION 11: PARTS LIST FOR PPN 41AD26CC401



### California / EPA Emission Control Warranty Statement; Your Warranty Rights and Obligations

The California Air Resources Board, EPA (Environmental Protection Agency), and MTD Southwest Inc. (MTD) are pleased to explain the emission Control System Warranty on your 2000 and later small off-road engine. In California and the 49 states, new small off-road engines must be designed, built and equipped to meet the state's stringent antismog standards. MTD must warrant the emission control system on your small off-road engine for the periods of time listed below provided there has been no abuse, neglect or improper maintenance of your small off-road engine.

Your Emission control system may include parts such as the carburetor or fuel-injection system, the ignition system, and catalytic converter. Also included may be hoses, belts, connectors and other emission-related assemblies.

Where a warrantable condition exists, MTD will repair your small off-road engine at no cost to you including diagnosis, parts and labor.

The 2000 and later small off-road engines are warranted for two years. If any emission-related part on your engine is defective, the part will be repaired or replaced by MTD.

#### Owner's Warranty Responsibilities:

- As the small off-road engine owner, you are responsible for the performance of the required maintenance listed in your operator's manual. MTD recommends that you retain all receipts covering maintenance on your small off-road engine, but MTD cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.
- As the small off-road engine owner, you should however be aware that MTD may deny you warranty coverage if your small off-road engine or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.
- You are responsible for presenting your small off-road engine to a MTD authorized service center as soon as problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days.

If you have any questions regarding your warranty rights and responsibilities, you should call 1-800-345-8746

#### Manufacturer's Warranty Coverage:

- The warranty period begins on the date the engine or equipment is delivered to the retail purchaser.
- The manufacturer warrants to the initial owner and each subsequent purchaser, that the engine is free from defects in material and workmanship which cause the failure of a warranted part for a period of two years.
- Repair and replacement of warranted part will be performed at no charge to the owner at an authorized MTD service center. For the nearest location please contact MTD at: 1-800-345-8746.
- Any warranted part which is not scheduled for replacement, as required maintenance or which is scheduled only for regular inspection to the effect of "Repair or Replace as Necessary" is warranted for the period. Any warranted part which is scheduled for replacement as required maintenance will be warranted for the period of time up to the first scheduled replacement point for that part.
- The owner will not be charged for diagnostic labor which leads to the determination that a warranted part is defective. If the diagnostic work is performed at an authorized MTD Service Center.
- The manufacturer is liable for damages to other engine components caused by the failure of a warranted part still under warranty.
- Failures caused by abuse, neglect or improper maintenance are not covered under warranty.
- The use of add-on or modified parts can be grounds for disallowing a warranty claim. The manufacturer is not liable to cover failures of warranted parts caused by the use of add-on or modified parts.
- In order to file a claim, go to your nearest authorized MTD Service Center. Warranty service or repairs will be provided at all authorized MTD Service Centers.
- Any manufacturer approved replacement p[art may be used in the performance of any warranty maintenance or repair of emission related parts and will be provided without charge to the owner. Any replacement part that is equivalent in performance or durability may be used in non-warranty maintenance or repair and will not reduce the warranty obligations of the manufacturer.
- The following components are included in the emission related warranty of the engine, air filter, carburetor, primer, fuel lines, fuel pick up/fuel filter, ignition module, spark plug and muffler.

### MANUFACTURER'S LIMITED WARRANTY FOR:



The limited warranty set forth below is given by MTD SOUTHWEST INC ("MTD") with respect to new merchandise purchased and used in the United States, its possessions and territories.

MTD warrants this product against defects in material and workmanship for a period of one (1) year commencing on the date of original purchase and will, at its option, repair or replace, free of charge, any part found to be defective in material or workmanship. This limited warranty shall only apply if this product has been operated and maintained in accordance with the Operator's Manual furnished with the product, and has not been subject to misuse, abuse, commercial use, neglect, accident, improper maintenance, alteration, vandalism, theft, fire, water or damage because of other peril or natural disaster. Damage resulting from the installation or use of any accessory or attachment not approved by MTD for use with the product(s) covered by this manual will void your warranty as to any resulting damage. This warranty is limited to ninety (90) days from the date of original retail purchase for any MTD product that is used for rental or commercial purposes, or any other incomeproducing purpose.

HOW TO OBTAIN SERVICE: Warranty service is available, WITH PROOF OF PURCHASE THROUGH YOUR LOCAL AUTHORIZED SERVICE DEALER. To locate the dealer in your area, please check for a listing in the Yellow Pages or contact the Customer Service Department of MTD SOUTHWEST INC by calling 1-800-345-8746 or writing to 550 N. 54th Street, Chandler, Arizona 85226 or if in Canada call 1-800-668-1238. No product returned directly to the factory will be accepted unless prior written permission has been extended by the Customer Service Department of MTD SOUTHWEST INC.

# This limited warranty does not provide coverage in the following cases:

- A. Tune-ups Spark Plugs, Carburetor Adjustments, Filters.
- B. Wear items Bump Knobs, Outer Spools, Cutting Line, Inner Reels, Starter Pulley, Starter Ropes, Drive Belts.
- C. MTD does not extend any warranty for products sold or exported outside of the United States of America, its possessions and territories, except those sold through MTD's authorized channels of export distribution.

MTD reserves the right to change or improve the design of any MTD Product without assuming any obligation to modify any product previously manufactured. No implied warranty, including any implied warranty of merchantability or fitness for a particular purpose, applies after the applicable period of express written warranty above as to the parts as identified. No other express warranty or guaranty, whether written or oral, except as mentioned above, given by any person or entity, including a dealer or retailer, with respect to any product shall bind MTD. During the period of the Warranty, the exclusive remedy is repair or replacement of the product as set forth above. (Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.)

The provisions as set forth in this Warranty provide the sole and exclusive remedy arising from the sales. MTD shall not be liable for incidental or consequential loss or damages including, without limitation, expenses incurred for substitute or replacement lawn care services, for transportation or for related expenses, or for rental expenses to temporarily replace a warranted product. (Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.)

In no event shall recovery of any kind be greater than the amount of the purchase price of the product sold. Alteration of the safety features of the product shall void this Warranty. You assume the risk and liability for loss, damage, or injury to you and your property and/or to others and their property arising out of the use or misuse or inability to use the product.

This limited warranty shall not extend to anyone other than the original purchaser, original lessee or the person for whom it was purchased as a gift.

How State Law Relates to this Warranty: This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

To locate your nearest service dealer dial 1-800-345-8746 in the United States or 1-800-668-1238 in Canada.

# MTD SOUTHWEST INC

550 N. 54th Street Chandler, AZ 85226 U.S.A.